



309369

RECEIVED MAR 23 1985

MARCH 19, 1985

TO: SUPERINTENDENT UTT  
FROM: SCOTT GERRICK, ENVIRONMENTAL CONTROL MANAGER  
RE: MALLARD LAKE DECEMBER 1984 WATER QUALITY REPORT

Attached for your review are the water quality analysis from the monitoring wells at Mallard Lake Landfill in December 1984. Water quality was also checked from E & E's office supply well.

No unusual or significant changes were noted.

cj

Attachment

cc:

J. Hartwig

J. Wiggins, III. E.P.A.



## TESTING SERVICE CORPORATION

457 EAST GUNDERSEN DR. • CAROL STREAM, ILLINOIS 60188-2492

Dr. Lawrence A. DuBose, P.E., S.E. *President*  
Charles C. Luther, P.E. *Executive Vice-President*  
Noble D. Moran *Vice-President*  
Bruce R. Poynor *Engineering Geologist*  
Charles R. DuBose, P.E.  
Thomas J. Morris, P.E.  
Scott B. Stueland, P.E.  
Telephone 312 653-3920

March 15, 1985

FOREST PRESERVE DISTRICT  
OF DU PAGE COUNTY  
P. O. Box 2339  
Glen Ellyn, Illinois 60138

Attention: Mr. Scott Gerrick  
Environmental Control Mgr.  
Governmental Services Dept.

RE: L - 19,559A  
MALLARD LAKE SITE

Dear Mr. Gerrick:

We have completed the December, 1984 purging and sampling work for the above referenced site and have received the analytical results from Aqualab, Inc. Our field procedures in performing this work are as outlined in previous correspondence dated September 6, 1983, with the above number. Due to low water levels, or in-accessibility, Monitoring Wells G-102, G-107A, G-109, G-110 and G-111 were purged via bailer.

Water samples obtained from the monitoring wells and the leachate collection manhole were analyzed by Aqualab, Inc. for the following parameters: pH, Total Dissolved Solids, Chloride, Lead and Zinc. Data for Chromium are also included. This is because Chromium was originally analyzed rather than Chloride as intended. A water sample was also obtained from the E & E Hauling supply well at the site. This sample was analyzed for Alkalinity, Arsenic, Barium, Calcium, Chloride, Chromium, COD, Copper, Cyanide, Hardness, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Nitrogen, pH, Phenols, Potassium, Sodium, Solids (Total Dissolved), Sulfate, Zinc and TOC. The results obtained are shown on the enclosed Aqualab, Inc. Analytical Report. The identity of the sample numbers can be determined from the enclosed Chain of Custody Record.

Also enclosed are electronic spreadsheets for each well from our computer file established for this project. This lists the analytical data obtained this quarter as well as the previous seven (7) quarters, and compares them. No unusual or significant changes were noted.

Water level measurements and water sample temperatures, along with a depth measurement to the bottom of the well or sediment inside the casing, are shown on both the electronic spreadsheets and the enclosed Field Data Chart.

March 15, 1985  
FOREST PRESERVE DISTRICT  
OF DU PAGE COUNTY  
Attention: Mr. Scott Gerrick

L - 19,559A  
Page 2

It has been a pleasure to assist you with this project. Please call if there are any questions or if we can be of any further service.

Respectfully submitted,

TESTING SERVICE CORPORATION

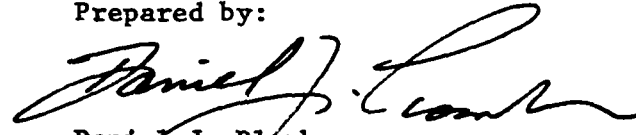


Lawrence A. DuBose  
President

LAD:DJP:js

Enclosures:

Prepared by:



Daniel J. Plomb  
Geologist

## FIELD DATA CHART

MONITORING WELL	DATE 1984		WATER LEVEL DEPTH* IN FT. WITH ELEVATION				WATER TEMP °F	DEPTH* TO BOTTOM OF WELL OR SEDIMENT INSIDE CASING
	PURGED	SAMPLED	PRIOR TO PURGING		PRIOR TO SAMPLING			
G-101S	12-13-84	12-14-84	12.02	(792.62)	21.00	(783.64)	50	23.5
G-101D	12-13-84	12-14-84	39.11	(765.47)	48.87	(755.71)	49	54.6
G-102**	12-13-84	12-14-84	41.73	(767.22)	42.81	(766.14)	50	46.9
G-103	12-13-84	12-14-84	44.30	(756.98)	56.84	(744.44)	50	59.5
G-104A	12-13-84	12-14-84	64.88	(729.88)	64.83	(729.83)	49	95.6
G-105A	12-13-84	12-14-84	55.63	(731.81)	55.58	(731.86)	49	102.3
G-106A	12-13-84	12-14-83	42.12	(738.52)	65.19	(715.45)	50	72.3
G-107A**	12-13-84	12-14-84	17.41	(756.05)	18.32	(755.14)	50	32.8
G-108S	12-13-84	12-14-84	17.84	(766.32)	18.01	(766.15)	50	21.9
G-108D	12-13-84	12-14-84	38.47	(746.72)	42.24	(742.95)	Insufficient Sample	48.3
G-109**	12-13-84	12-14-84	20.53	(765.12)	25.48	(760.17)	50	33.7
G-110**	12-13-84	12-14-84	40.72	(765.07)	45.75	(760.04)	49	47.4
G-111**	12-13-84	12-14-84	39.05	(771.43)	40.97	(768.51)	Insufficient Sample	42.4
G-112	12-13-84	12-14-84	49.18	(764.33)	49.48	(764.03)	49	58.6
G-113	12-13-84	12-14-84	41.48	(764.62)	47.03	(759.07)	49	53.0
NOTES:      * Depths referenced to top of steel protector casing cap. ** Indicates wells purged via bailer due to low water levels or in-accessibility of well to drill rig.								

**TESTING SERVICE CORPORATION**  
**457 EAST GUNDERSEN DRIVE**  
**CAROL STREAM, ILLINOIS 60188**

L- 19,559A

## CHAIN OF CUSTODY RECORD

<b>CLIENT:</b> FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		<b>PROJ:</b> MALLARD LAKE		<b>SAMPLER(S):</b> D. Plomb & R. Harris			
SPL. NO.	SPL. LOCATION	DATE - TIME 1984	SPL. TYPE		NO. OF BTLS.	NOTES	
			WATER COND.	STAB			
675	G-101S	12-14 7:55		X	1		
676	G-101D	12-14 7:45		X	1		
677	G-102	12-14 8:05		X	1		
678	G-103	12-14 8:10		X	1		
679	G-101S QA Split	12-14 7:55		X	1		
680	G-104	12-14 8:20		X	1		
681	G-113	12-14 8:40		X	1		
682	G-112	12-14 8:45		X	1		
683	G-111	12-14 8:55		X	1		
684	G-110	12-14 9:20		X	1		
685	G-109	12-14 9:35		X	1		
686	G-108S	12-14 9:50		X	1		
687	G-108D	12-14 9:55		X	1		
<b>RELINQUISHED BY</b>		<b>RECEIVED BY</b>				<b>DATE - TIME</b>	
TESTING SERVICE CORPORATION		AQUALAB, INC.				12-14-85	

**TESTING SERVICE CORPORATION**  
**457 EAST GUNDERSEN DRIVE**  
**CAROL STREAM, ILLINOIS 60188**  
**L- 19,559A**

## CHAIN OF CUSTODY RECORD

<b>CLIENT:</b> FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		<b>PROJ:</b> MALLARD LAKE		<b>SAMPLER(S):</b> D. Plomb & R. Harris			
SPL. NO.	SPL. LOCATION	DATE - TIME 1984	SPL. TYPE		NO. OF BTLs.	NOTES	
			WATER COND.	STAB			
688	MANHOLE: Leachate Collection System	12-14 10:05		X	4		
689	G-105A	12-14 10:20		X	1		
690	G 106A	12-14 10:40		X	1		
691	G-108A QA Split	12-14 9:55		X	1		
692	G-107A	12-14 10:55		X	1		
693	E & E BUILDING	12-14 11-15		X	2		
<b>RELINQUISHED BY</b>		<b>RECEIVED BY</b>			<b>DATE - TIME</b>		
TESTING SERVICE CORPORATION		AQUALAB, INC.			12-14-85		

**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



5 March 1985

---

**ANALYTICAL REPORT**

**Sample No. 60806A-823A**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

Date Requested: 2/22/85

<u>Sample Description</u>	<u>Chloride</u> <u>mg/L</u>
675	14.
676	32.
677	<1.
678	2.
679	14.
680	2.
681	<1.
682	126.
683	2.
684	2.
685	2.
686	2.
687	4.
688	216.
689	36.
690	2.
691	4.
692	4.

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60824**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 693**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Alkalinity (CaCO <sub>3</sub> )	216.	mg/L
Arsenic	<0.001	mg/L
Barium	<0.01	mg/L
Cadmium	<0.001	mg/L
Chloride	60.	mg/L
Chromium, tot.	<0.001	mg/L
COD	208.	mg/L
Copper	<0.001	mg/L
Cyanide, tot.	<0.001	mg/L
Hardness (CaCO <sub>3</sub> )	380.	mg/L
Iron, tot.	<0.01	mg/L
Lead	<0.01	mg/L
Magnesium	45.5	mg/L
Manganese	0.012	mg/L
Mercury	<0.0001	mg/L
Nickel	<0.01	mg/L
Nitrogen, ammonia	0.31	mg/L
pH	7.32	units
Phenols	<0.002	mg/L
Potassium	2.40	mg/L
Sodium	43.6	mg/L
Solids, tot. diss.	616.	mg/L
Sulfate	135.	mg/L
Zinc	0.059	mg/L
TOC	14.2	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro



**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

---

**ANALYTICAL REPORT**

Sample No. 60807

Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 676**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.40	units
Solids, tot. diss.	457.	mg/L
Zinc	0.003	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60822**

Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 691**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	0.09	mg/L
Lead	<0.01	mg/L
pH	7.55	units
Solids, tot. diss.	1593.	mg/L
Zinc	0.006	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

---

**ANALYTICAL REPORT**

**Sample No. 60809**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 678**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	0.03	mg/L
Lead	<0.01	mg/L
pH	11.06	units
Solids, tot. diss.	1287.	mg/L
Zinc	<0.001	mg/L

*Robert N. Bucaro*

Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60820**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 689**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.02	units
Solids, tot. diss.	757.	mg/L
Zinc	<0.001	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60811**

Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 680**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.09	units
Solids, tot. diss.	547.	mg/L
Zinc	0.006	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

## ANALYTICAL REPORT

Sample No. 60818

Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188

### SAMPLE DESCRIPTION: 687

Date Taken: 12/14/84

Date Received: 12/14/84

### Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.58	units
Solids, tot. diss.	1460.	mg/L
Zinc	0.005	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60813**

Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 682**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	6.83	units
Solids, tot. diss.	2063.	mg/L
Zinc	0.010	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

---

**ANALYTICAL REPORT**

**Sample No. 60816**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 685**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	6.84	units
Solids, tot. diss.	1313.	mg/L
Zinc	0.017	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro



**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60815**

**Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188**

**SAMPLE DESCRIPTION: 684**

**Date Taken: 12/14/84**

**Date Received: 12/14/84**

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.38	units
Solids, tot. diss.	523.	mg/L
Zinc	<0.001	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

---

**ANALYTICAL REPORT**

**Sample No. 60814**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 683**

**Date Taken: 12/14/84**

**Date Received: 12/14/84**

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.27	units
Solids, tot. diss.	550.	mg/L
Zinc	0.003	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60817**

**Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188**

**SAMPLE DESCRIPTION: 686**

**Date Taken: 12/14/84**

**Date Received: 12/14/84**

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	6.60	units
Solids, tot. diss.	670.	mg/L
Zinc	0.012	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

---

**ANALYTICAL REPORT**

**Sample No. 60812**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 681**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.39	units
Solids, tot. diss.	410.	mg/L
Zinc	0.003	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

## ANALYTICAL REPORT

Sample No. 60819

Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188

### SAMPLE DESCRIPTION: 688

Date Taken: 12/14/84

Date Received: 12/14/84

### Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.58	units
Solids, tot. diss.	2183.	mg/L
Zinc	0.005	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

---

**ANALYTICAL REPORT**

**Sample No. 60810**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 679**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.02	units
Solids, tot. diss.	590.	mg/L
Zinc	0.007	mg/L

*Robert A. Bucaro*  
Robert N. Bucaro

**aqualab inc.**

850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60821**

Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 690**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	11.31	units
Solids, tot. diss.	2810.	mg/L
Zinc	0.005	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60808**

**Mr. Bruce Poyner  
TESTING SERVICE CORP.  
457 E. Gunderson  
Carol Stream IL 60188**

**SAMPLE DESCRIPTION: 677**

**Date Taken: 12/14/84**

**Date Received: 12/14/84**

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.26	units
Solids, tot. diss.	627.	mg/L
Zinc	<0.001	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro



**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

---

**ANALYTICAL REPORT**

**Sample No. 60806**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 675**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.38	units
Solids, tot. diss.	467.	mg/L
Zinc	<0.001	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60100  
312/289-3100



11 February 1985

**ANALYTICAL REPORT**

**Sample No. 60806**

Mr. Bruce  
TESTING  
457 E.  
Carol S

38

**SAMPLE 675**

**Date Taken 4**

**Date Received: 12/14/84**

**Filter**

um, tot.	<0.001	mg/L
	<0.01	mg/L
	<0.01	mg/L
	7.38	units
, tot. diss.	467.	mg/L
	<0.001	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro

**aqualab inc.**  
850 W. Bartlett Road  
Bartlett, Illinois 60103  
312/289-3100



11 February 1985

---

**ANALYTICAL REPORT**

**Sample No. 60823**

Mr. Bruce Poyner  
**TESTING SERVICE CORP.**  
457 E. Gunderson  
Carol Stream IL 60188

**SAMPLE DESCRIPTION: 692**

Date Taken: 12/14/84

Date Received: 12/14/84

**Filtered:**

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.10	units
Solids, tot. diss.	507.	mg/L
Zinc	0.006	mg/L

*Robert N. Bucaro*  
Robert N. Bucaro